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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,046	12/16/2003	Michael S. Hibbs	BUR920010135US2	4755
23550	7590	10/08/2004	EXAMINER	
HOFFMAN WARNICK & D'ALESSANDRO, LLC			NGUYEN, HUNG	
3 E-COMM SQUARE			ART UNIT	
ALBANY, NY 12207			PAPER NUMBER	
			2851	

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,046

Applicant(s)

HIBBS, MICHAEL S.

Examiner

Hung Henry V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-25, 27-32, 34 and 36-40 is/are rejected.
- 7) ☒ Claim(s) 26, 33, 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 21-27, 32, 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato (U.S.Pat. 6,791,661).

With respect to claim 21, Sato (figure 6) discloses a mounting system for a pellicle and comprising all basic structures of the claim such as: a mounting structure (PF) for coupling a pellicle (PE) to a mask (M) wherein a sealed interior portion (GS) is formed between the pellicle, the mask and the mounting structure, and a pressure regulator (92) in communication with the seal interior portion to control a pressure in the interior portion (see col.4, lines 20-35).

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As to claims 22-23, Sato discloses a source of high pressure gas (94,94a) coupled to the pressure regulator and a source of low pressure gas (93, 93a) coupled to the pressure regulator wherein one of the sources of pressure gas is the exterior environment.

As to claims 24, and 29, Sato further disclose a pressure sensor (87) operatively coupled to the pressure regulator for detecting a pressure of the interior portion (see col.4, lines 44-50).

As to claim 25, Sato teaches a detector (85) for measuring the position of the pellicle.

As to claim 27, Sato discloses a calibrated leak/ventilation hole (h) from the interior portion to an exterior environment.

Regarding claims 37, 39-40, the method claims are seen to be inherent teachings in the existence of the above apparatus.

3. Claims 21-24, 27, 39-40, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nakano (U.S.Pat. 6,788,392).

With respect to claims 21-23, Nakano (figure 1) discloses a mounting system for a pellicle and comprising all the limitations of the claim such as: a mounting structure (28) for coupling a pellicle (24) to a mask (23) wherein a sealed interior portion (36) is formed between the pellicle, the mask and the mounting structure, and a pressure regulator (32, 33) in communication with the seal interior portion to control a pressure in the interior portion. Nakano further discloses a source of high pressure gas (34) coupled to the pressure regulator and a source of low pressure gas (35) coupled to the pressure regulator wherein one of the sources of pressure gas is the exterior environment.

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As to claims 24, and 29, Nakano disclose a pressure sensor (31) operatively coupled to the pressure regulator for detecting a pressure of the interior portion. (see col8, lines 57-60)

As to claim 27, Nakano further discloses a calibrated leak/ventilation hole (see figure 1) from the interior portion to an exterior environment.

Regarding claims 37, 39-40, the method claims are seen to be inherent teachings in the existence of the above apparatus.

4. Claims 21, 29, 37 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Yasuda et al (U.S. 2003/0016338 A1).

With respect to claims 21, 29 and 37, Yasuda (figure 1) discloses a mounting system comprising all structures set forth in the instant claims including: a mounting structure for coupling a pellicle (38) to a mask (10) wherein a sealed interior portion (40) is formed between the pellicle, the mask and the mounting structure, and a pressure regulator (32, 34) in communication with the seal interior portion via a port (36) to control a pressure in the interior portion.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 28, 30-31, 34, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Sato (U.S.Pat. 6,791,661) or Nakano (U.S.Pat. 6,788,392) in view of Sego (U.S.Pat. 6,055,040).

With respect to claims 28, 30-31, 34 and 36-38, Sato or Nakano discloses a mounting system for a pellicle and comprising substantially all of the limitations of the claims as discussed except for “an aerodynamic fairing” as recited in the instant claims. Sego teaches a device for holding a pellicle. Sego further discloses a structure constituting of a portion of the membrane (230) attached to frame (240) at the top of the outer wall (251) with an adhesive (401) for the purpose of reducing turbulent air flow exerted on the pellicle (see figure 4, and col.7, lines 45-56). In view of such teachings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Sato/or Sakano and Sego to obtain the invention as specified in the above mentioned claims. It would have been obvious to a skilled artisan to utilize the structure/“aerodynamic fairing” as taught by Sego into the mounting device of Sato/or Nakano for the purpose of reducing the deformation of the pellicle due to the effects of the air turbulence when the mask is moving whereby the operation life of the device is greatly prolonged.

Allowable Subject Matter

7. Claims 26, 33, 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggests the pressure difference in the sealed interior portion being controlled to maintain a flat surface on the pellicle based on a reading from a velocity as recited in claims 26 and 33.

As to claim 35, among with the other features, the prior art of record lacks to a retractable plate for providing a substantially continuous surface between the aerodynamic fairings.

Prior Art Made of Record

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eynon (U.S.Pat. 6,524,754) discloses a mounting structure for a pellicle and comprising substantially all elements as recited in the instant claims of the present application.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hung Henry V Nguyen', followed by a long horizontal line extending to the right.

Hung Henry V Nguyen
Primary Examiner
Art Unit 2851

hvn
10/1/04